

Attorney Docket No. T1118/20075
Amendment Dated 12/02/04

REMARKS/ARGUMENTS

By this Amendment, claims 1 and 2 are amended, claim 8 is canceled. Claims 1-48 are pending. No new matter is added.

Support for the amendment of claims 1 and 2 can be found in the instant specification on page 13, lines 16-30.

Objection to claim 8

Claim 8 was objected to under 37 CFR 1.75(c) as being broader in scope than claim 1. This objection is now moot because claim 8 has been canceled.

Rejection of claims 1-48 Under the Judicially Created Doctrine of Obviousness-Type Double Patenting

Claims 1-48 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-27 of copending Application No. 10/672,892.

This rejection is obviated by the attached Terminal Disclaimer executed by the assignee of the application, The Children's Hospital of Philadelphia, in compliance with 37 CFR 1.130(b). A Statement Under 3.73(b) is also attached. Authorization to charge the fee for the disclaimer is provided on the attached Fee Transmittal for FY 2004.

Accordingly, reconsideration and withdrawal of the obviousness-type double patenting rejection are respectfully requested.

Rejection of claims 1, 12 and 15 Under 35 U.S.C. 102(a) as being anticipated by U.S. Patent No. 6,320,011 to Levy et al

Claims 1, 12 and 15 stand rejected under 35 U.S.C. 102(a) as being anticipated by Levy

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et al. (see Figure 2 and col. 7, lines 61-62). This rejection is respectfully traversed. The base claim 1 as amended obviates the rejection.

Levy et al. teach a polyurethane having a sulfur-containing substituent (e.g., a geminal bisphosphonate thiol or a thioalkylamine moiety) which is grafted with a urethane amino moiety of the polyurethane as disclosed in Section 13, lines 28-67 and Section 16, lines 30-66. The sulfur-containing substituents disclosed by Levy et al. differ from the thiol substituents of the present invention and thereby yield polyurethanes having distinctively different properties. In the sulfur-containing substituents disclosed by Levy et al., a sulfur atom is connected to a carbon atom of an alkylene, an alkenylene, or an arylene part of a bisphosphonate moiety or an alkylamine moiety and therefore, the bond between the sulfur atom and the carbon atom is much stronger and cannot be broken without damaging the polyurethane' backbone. On the contrary, in the present invention, the sulfur atom of the thiol substituent is connected to a group which can be removed or deprotected without damaging the polyurethane. For example, the sulfur atom of the thiol substituent is connected to a carbon atom of a carbonyl group ($\text{S}-\text{C}(\text{O})\text{R}^3$) or forms a disulfide bond with another sulfur atom ($\text{S}-\text{SR}^4$). Thus, the thiol substituent of the present invention can be deprotected by taking off a removable fragment of the thiol substituent (e.g., $-\text{C}(\text{O})\text{R}^3$ or $-\text{SR}^4$) connected to the sulfur atom of the thiol substituent such that after deprotecting, the sulfur atom of the thiol substituent remains pending from the polyurethane as disclosed on page 13, lines 21-30 of the application. Because of these fundamental differences, claim 1 as amended is not anticipated by Levy et al.

Claims 12 and 15 depend from claim 1 and are not anticipated by Levy et al. for at least the same reasons claim 1 is not anticipated.

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Therefore, reconsideration and withdrawal of the Section 102 (a) rejection of claims 1, 12 and 15 are respectfully requested.

Further, claim 1 as amended is also non-obvious over Levy et al. for the reasons discussed below.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion of motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or reference when combined) must teach or suggest all the claim limitations. MPEP § 2143. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaack*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

The Levy et al. reference does not teach or suggest all the claim limitations. Specifically, it does not teach or suggest a thiol substituent comprising a sulfur atom and a removable fragment connected to the sulfur atom such that when the removable fragment is removed, the sulfur atom of the thiol substituent remains pending from the polyurethane.

Following the Levy et al. reference, one of ordinary skill in the art would have lacked motivation to use this reference to make the polyurethane of the present invention with a reasonable expectation of success. Absent such reasonable motivation, there can be no *prima facie* case of obviousness. See, e.g., MPEP §2143.

Claims 12 and 15 depend from claim 1 and are unobvious over Levy et al. for at least the same reasons claim 1 is unobvious.

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For at least the reasons set forth above, it is respectfully submitted that the above-identified application is in condition for allowance. Favorable reconsideration and prompt allowance of the claims are respectfully requested.

Should the Examiner believe that anything further is desirable in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned attorney at the telephone number listed below.

Respectfully submitted,

CAESAR, RIVISE, BERNSTEIN,
COHEN & POKOTILOW, LTD.

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By Marina E. Volin

Marina E. Volin
Registration No. 52,328
Customer No. 03000
(215) 567-2010
Attorneys for Applicants

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